

Regional Activity to Promote Integration through
Dialogue and Policy Implementation (RAPID)
REGIONAL MARKET INTEGRATION



AFRICA RAIL 2001
THE PROCESS OF RAIL CONCESSIONING IN SADC
STATES

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1 An Overview

The first part of this paper brings out the relationship between the performance of SADC railways/transport costs and trade. The typical railway privatisation process that commences after the State has decided to restructure a railway with private sector participation in line with the Transport Protocol is then described. The stages in the concession process at which government decisions and approval is required are identified. The actual experience of rail concession process in SADC states is reviewed and compared with that on other railways of the world. Lessons learnt from the concession process so far are then described.

In the second part of the paper, benchmarking of the current performance of SADC railways with other railways is carried out. This exercise includes the performance of some small railways before and after concessioning. A hypothetical SADC railway is considered before and after concession. Its performance is modeled based on average parameters of six SADC railways and expected post-concession parameters based on international experience. It is seen that concessioning will turn the loss-making railway into a profitable entity and the railway would increase market share and provide improved service quality at lower tariff. It is concluded that the States must

- Generate political support for rail privatization as per the Protocol
- Organize adequate measures to provide a safety net for surplus staff, retraining and redeployment
- Access funding for labour downsizing

Further it is noted that:

- There is a negative impact of proceeding slowly with the concession process
- Concessions of small railways have potential of turning around loss making railways to profitability, better service quality and lower tariffs
- Concessions of small railways are viable for the concessionaire as well as the States
- Loss making branch lines could be turned round to profitability

2 Background

National railways are a strategic part of each Member States' transport portfolio. Viewed collectively, SADC's railway system has the potential of an efficient, cost effective, and seamless regional railway service, and one that can not only compete with road transport services but also make exports and imports more competitive.

Transport Sector and Trade: A recent paper¹ argues that improving transport infrastructure in Africa is an important factor for increasing the continent's trade. It demonstrates that if

¹ INFRASTRUCTURE, GEOGRAPHICAL DISADVANTAGE AND TRANSPORT COSTS
(N. Limao and A.J. Venables, World Bank Development Research – Policy Research Working Paper 2257)

improvements in infrastructure services could halve transport costs in the region, this would stimulate increases in trade volumes by a factor of five.

The central message from this paper is that most of Africa's poor trade performance can be accounted for by poor infrastructure (road, rail and telecommunications). With specific regard to the SADC region, the authors estimated transport costs for selected SADC countries. The results show that if the transport cost is expressed as a multiple of the USA-Germany transport cost, indexed at 1.00 and used as the base cost, it is seen that that landlocked countries such as Zambia, Zimbabwe and Malawi are likely to have a relatively high transport cost, with most of their costs approaching or exceeding two.

Transport Costs

Between	United States	Japan	South Africa	Demo. Republic of Congo	Uganda
USA		1.0	1.7	2.0	2.6
Malawi	2.6	1.8	1.2	1.8	2.0
Zambia	2.7	2.1	1.2	1.2	2.3
Zimbabwe	2.4	1.7	0.5	1.7	2.0

USA-Europe = 1.0 (base)

The authors ran regressions to establish the responsiveness of imports to the transport costs cited in the model used. They got elasticity measures of 2.95 for home country infrastructure and 2.34 for transit country infrastructure. They ran consistency checks that rejected the equality of these estimates suggesting a combined impact factor on imports of over five. In other words, doubling the transport cost rate in the sample of countries used will on average reduce imports five-fold. If these elasticity measures are assumed to approximate those applicable to the SADC region alone, then it could be said that conversely, halving transport costs in the region could increase SADC trade by a factor of five.

Currently, the unit cost of transporting goods in the SADC region is much higher on average than the unit cost of transporting goods in the U.S and other developed countries. Apart from the unit cost, large distances must be covered in SADC, with the result that total transportation costs are also quite high.

Thus freight costs are an important economic consideration in SADC's regional and international trade. High freight costs will stifle current trade and discourage new trade.

SADC Protocol on Transport, Communications and Meteorology, lays down foundations of the harmonised regional railway policy for economic and institutional restructuring which shall include, inter alia, consideration of the following:

- i) according autonomy to railways...
- ii) increasing private sector involvement in railway investment...
- iii) enhancing operational synergy amongst the various railway service providers in the region; and

iv) promoting the establishment of an integrated transport system...

Implementation of the protocol would go a long way in obtaining the improved efficiency and lower transport costs that are so essential to promote trade.

A Workshop to discuss the SADC Railway Policy Options was held in Pretoria in September 1996. Representatives of all SADC states attended this Workshop. Amongst the conclusions reached at this Workshop were the following:

- Some form and degree of private sector participation in the rail industry is essential for SADC railways to achieve sustainable commercial viability.
- Concessioning is the preferred approach to facilitate private sector participation in the rail industry but the optimal form of concessioning may differ from railway to railway.

Since 1996, several SADC States have taken up restructuring of their respective railways and after some independent studies came to the conclusion that concessioning was the most suitable option. However, the process of railway concessioning has made rather a slow progress. So far concessions have become operational only in Malawi and on the Bulawayo Beitbridge Railway (BBR). The railway concessions that are in various stages of the process include CFM, ZRL, NRZ, TRC and TAZARA.

This paper reviews the progress in the process of railway concessioning in SADC States and attempts to identify reasons that impede the process and delays the implementation of concessions.

3 Typical Rail Concession Process

The railway concession process starts soon after the state decides to restructure and seek private sector participation. In most cases the government nominates an agency to manage the process (Privatization Agency). It may also seek funding for advisory services and cost of labour downsizing. A consultant is appointed to recommend the most suitable privatization option in the context of the needs and objective of the state. The Ministry of Transport, Railway and Cabinet consider the recommendations and select a particular option for privatization. At this stage consultations with labour unions are also carried out. After the cabinet decision, the consultant is asked to prepare bid documents. The next steps are review of bid documents by the government before issue, receipt of bids, evaluation and approval of government of selection of concessionaire(s). The process manager then negotiates the contract and the concessionaire then arranges the financial closure of the deal. The last steps are handing over of assets to the concessionaire and the concession becoming operational.

Stages at which government approval/decision required

At the minimum, decision/approval of the government is required at the following stages

- unbundling of railway
- privatisation/concession format
- structure of bidding entities
- bid documents and evaluation

- level of compensation to surplus staff
- consultations with labour unions
- concession contract negotiations etc.

4 Progress on SADC Railways

Mozambique (CFM): Process started 1997 and likely to be operational in late 2001, 4+ years.
Concession agreement for Nacala port and railway signed (1999) but no financial closure thus far.
Concession agreement for Limpopo and Goba lines also signed but no financial closure thus far.

Zambia (ZRL): Process was started in 1998 and likely to be operational in mid 2002 at the earliest. Process takes +4 years

Consultant's report in May 1999

Bid documents await government approval

Earliest concession agreement by mid 2002

Financial closure may take more time

Staff reduced from 5880 to 3100 by local funding

Tanzania (TRC): Process started 1997 and concession would become operational earliest by mid 2002. Process takes at least 5 years.

Consultant's reports in 1997 and 2000, concession recommended

Government still reviewing report to finalize concession parameters

Zimbabwe (NRZ): Process started 1997 and abandoned in 1999. Process recommenced at the end of 2000 and a policy paper on railway restructuring is being prepared. However, a negotiated 30-year BOT concession for BBR (350 km railway link) became operational in July 1999.

The railway concession process in SADC states is slow as each stage of decision takes several months. The entire process takes 4 years or more. On the other hand the international experience is that the process should take about two years.

Argentina - Concession 2 years

Canada - Sale 2 years

Sweden - Open access 2 years

Malawi - Concession 3 years

5 Negative Impact of Slowing the Concession Process

The value of a railway concession is arrived at on the basis of several factors. One of the important factors is the condition of fixed and mobile assets and the investments that would be required to improve these to the required standards after a concession becomes operational. In the event that the restructuring/concessioning of a financially non-viable railway is delayed, with passage of time condition of its assets keeps deteriorating. This diminishes the value of the concession. At a certain point, there may even be no takers for the concession if it is perceived that cost of rehabilitation would not be justified by potential business.

Significant damage is caused to the railway during the transition period between the decision to concession and the concession becoming effective due to deterioration of assets and low morale of staff. It is therefore, advisable to complete the change in as short a time as possible.

6 Main Reasons for Delay

Lack of strong political support to the railway concession process is one of the main reasons for delay in first starting the railway concession process and later in completing it. In the event that the political support is uncertain, issues related to concession process are revisited again and again and decisions at government and political level take months instead of days.

Inadequate attention to labour downsizing process and retraining/redeployment of staff rendered surplus is another reason that slows down the concession process. Financial and social implications of down sizing of labour force are an important concern of the stakeholders. It is imperative that these issues are addressed adequately in advance in consultation with the affected parties and an agreed framework worked out. Zambia railways is a good example where following an active consultative process the railway was able to downsize the workforce from 5,800 to 3,100. This staff reduction took place without industrial unrest or any adverse effect on company operations. Rail privatization would succeed if adequately supported by measures that will provide a reasonable safety net for surplus staff. This includes generous compensation and measures for redeployment and retraining of affected staff. External funding is likely to be available to support such initiatives.

Delay in achieving financial closure to the concession agreement by the concessionaire has been noted in some cases. As a result the concessions did not become operational even 12 months after the signing of the agreements. The financial capacity of the selected party and issues such as the status of other entities on the transport corridor contributed to these delays. The concession contracts should include heavy penalties in the event of delays in financial closure of the concession contracts.

7 Lessons Learnt

- Railways run as SOEs have no future in the liberalized economic environment.
- Competition is the key to improving the efficiency, productivity and customer responsiveness of railways.
- Concessioning of state owned railways in SADC region is now accepted as inevitable yet some resistance from the beneficiaries of the present system would delay the process.
- Railway concessions cannot be driven internally. Creation of independent and empowered agencies such as Privatisation Agency should be entrusted the task of railway concessioning.
- The speed of the concession process is of critical importance to minimise infrastructure and equipment deterioration.
- It is equally important that the format and parameters of concessions are determined carefully so that the resultant contract is implemented smoothly and does not generate conflicts.

- A significant reduction in labour force will take place as the efficiency is sought to be enhanced. Adequate steps to provide a safety net and contain the social impact of downsizing must be devised and implemented.

8 Benchmarking SADC Railways With Private Railways

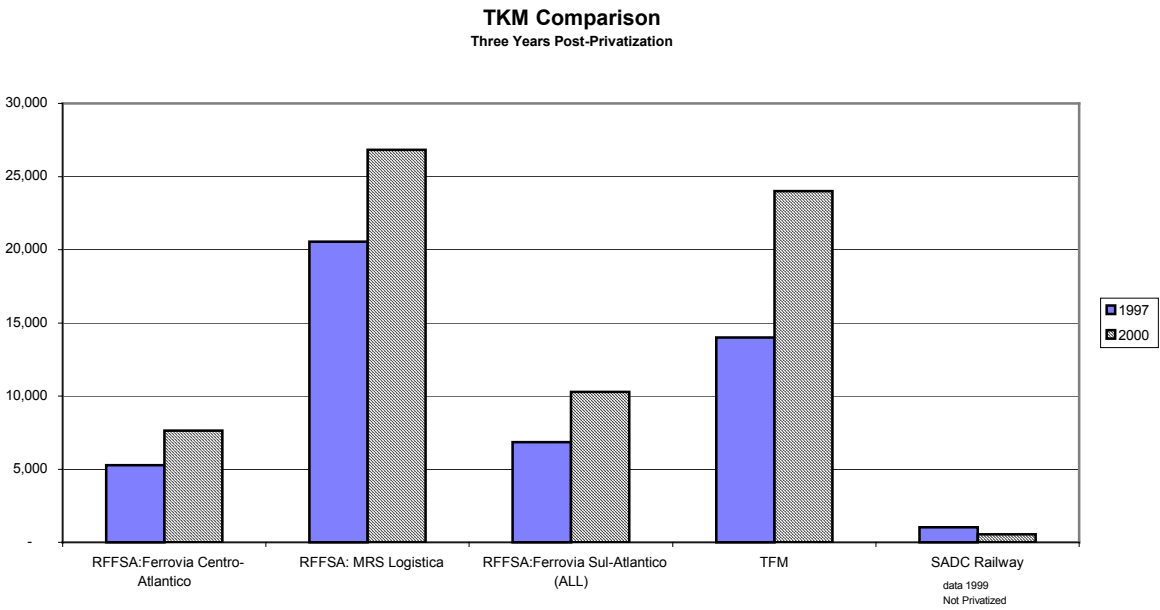
Attached to this document are several slides comparing the performance of several SADC railways with private railways of North and South America. The examples of North America have always been privately operated, with the exception of Mexico, while those of South America have only recently been privatized (since 1996). Line density of the selected SADC railways averages less than 500,000 net tons and it is expected that the railways of the developed countries would be higher. (TKM PER KM). Tariff levels are significantly higher, despite the significantly lower wage rates, and that adversely impacts the region's competitiveness. Some of the railways have tariff levels more than double rates of private railways. (Revenue Per TKM). Locomotive productivity is less than a fourth that of North American railways and less than half that of similarly situated South American railways. (TKM Per Locomotive). Revenue per employee is only a fraction of that of private railways. By comparison with the South American railways which were concessioned in 1997, the SADC average is less than 15% that of the privatized railways. (Revenue Per Employee). Despite the low line density shown above, the number of employees per KM is more than double that of other railways. (Employees Per KM). All of these factors combine to demonstrate the extremely low railway productivity, with production per employee less than five percent that of a recently privatized South American railway, and less than two percent of the larger railways. (Ton Kilometers Per Employee). By any measure, SADC railways must improve. These improvements would be possible through the injection of private sector investments and management practices.

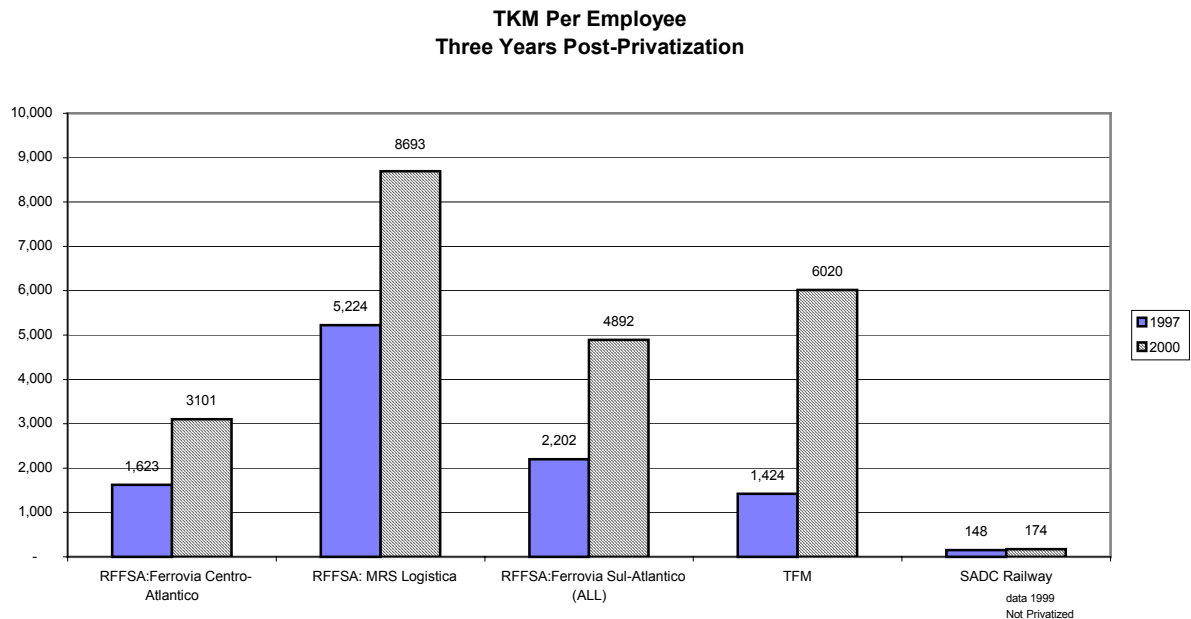
9 Conclusion

Progress in privatizing SADC railways has been slow. Inspection of railway facilities in the region shows, with a few exceptions, noticeable deterioration in infrastructure, service levels and the railway market share. Many of the railways now carry only 25% of past cargo volumes. Without significant change, the kind that only privatization can bring about, this deterioration will continue. The point will be reached where the conditions will not justify private sector investment and at that point the systems will simply be abandoned. Merely continuing the current government subsidies isn't a viable option because those subsidies have not been adequate to maintain the equipment or infrastructure. Continued operation would require far higher subsidies and that, realistically speaking, isn't going to happen.

We can gain from the experience in other parts of the world. Brazil, Argentina, Peru, Chile, Bolivia, and Mexico, to name a few, have successfully concessioned formerly state owned railways. Investment by the private sector has been significant, service levels have improved and business is returning to those railways. Many of those railways were in as bad a condition as SADC's before concessioning but now play a major role in trade and transport within their areas. Following concessioning, operational improvements allowed for significant capital investment. The following graphs depict improvement in operating parameters in the first three

years following concession for several Latin American railways. One SADC railway that is awaiting privatization is also shown for comparative purposes.





Southern Africa isn't alone in experiencing large financial losses and subsidies to state owned railways. Even when "corporatized", parastatal railways have proven inefficient in many other parts of the world. The following extract from a recent report sets out problems of parastatal railways experienced in certain parts of Europe.

In many OECD countries, the rail sector suffers from low productivity and large deficits (despite sizeable government subsidies). As an illustration, the average revenue per employee of freight transport services by railways of Britain, France, Italy and Germany in 1994 was between \$43 000 for France and \$19 500 for Italy, compared with \$155 000 in the US. More generally, in France, Italy and Spain, revenue collected by railways amounts to only half of the operating costs. In Italy, revenues do not even cover one third of costs ¹. In 1994 the total debt of the Italian national railway alone amounted to 4.9 per cent of Italy's national GDP

The Poor Performance Of Railways Can, In Many Countries, Be Attributed To A "Soft Budget Constraint"

A firm faces a "soft budget constraint" when it is partially or fully insured against the impact of bankruptcy. Under such circumstances, the firm's incentives to minimise costs, shed excess labour, improve services or develop new and innovative products, are dulled. The Italian experience was vividly described in the Italian submission:

"... FS's low performance ... seems to result from the existence of a weak budget constraint on the company's behaviour. In such a situation there are no significant incentives for the company to efficiently allocate internal resources in order to reduce the costs of providing services at the required quality standards. Such features also favour a particularly slack relationship between FS and its suppliers. ... [I]n the Italian rail industry a significant share of the monopolistic rent appears to be split among a large number of different players, including

managers, employees, suppliers and final consumers, whose vested interests are at present the strongest obstacle to any structural reform aimed at introducing competition and promoting economic efficiency.”³

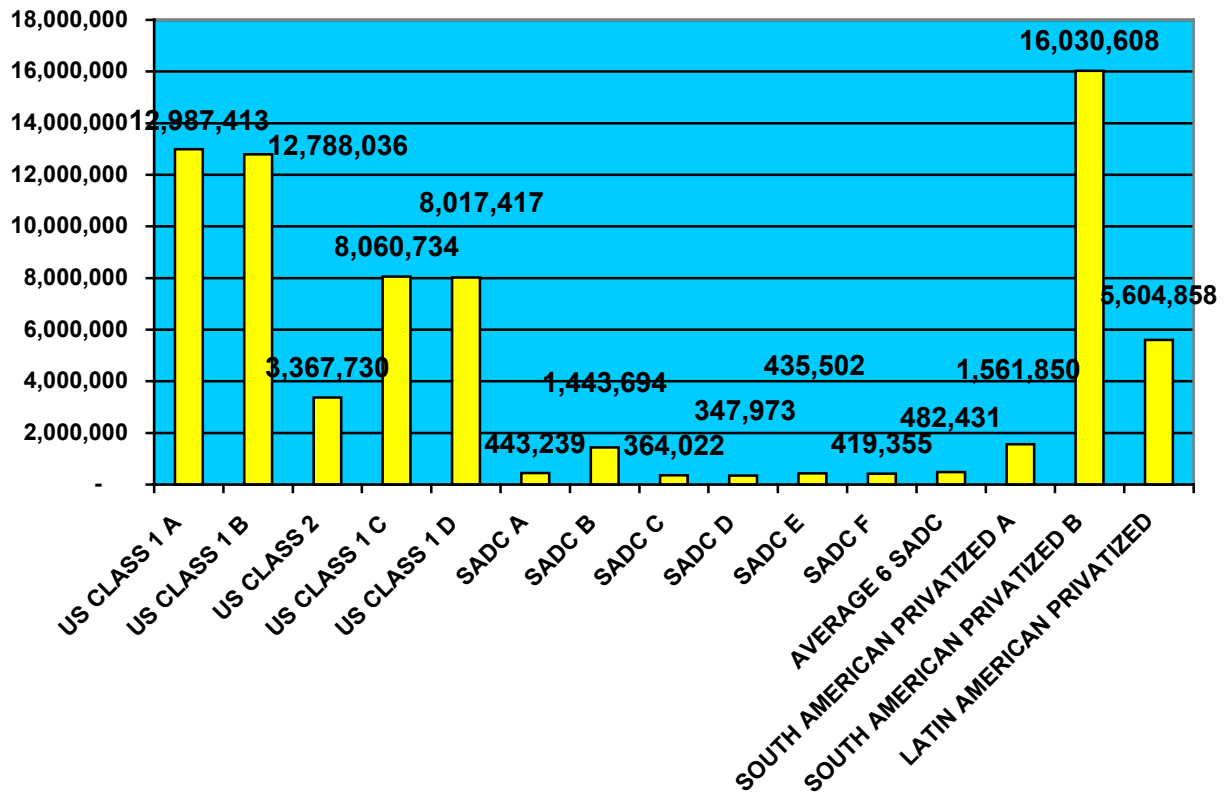
Importantly, the presence of a “soft budget constraint” on one firm in an industry will act as a significant deterrent to new entry from competitors who face a “hard budget constraint” and must earn a competitive rate of return on the capital they employ. (DAFFE/CLP(98)1 Competition Policy Roundtables, Executive Summary)

Some other countries have delayed concessioning and as a result, infrastructure has reached the state of de facto abandonment, and some Central American railway concession auctions have found no bidders. Similar situations exist in parts of Europe and Asia. Rumors and idle talk in this region sometimes state that privatization has been a failure in other parts of the world. That simply isn't the case. Others talk of the successful operation of state owned railways of North America. There is only one state owned railway to speak of in North America, that being Amtrak, which has lost in excess of \$25 billion USD in its 28-year life, hardly successful financially. All successful North American railways are privately owned and operated and that can also now be said for most of South America.

Retaining a railway transportation system in the SADC region is critical to long-term economic development of the region. Without major institutional changes, attracting private sector investment and management practices, the region's railway system will continue to deteriorate.

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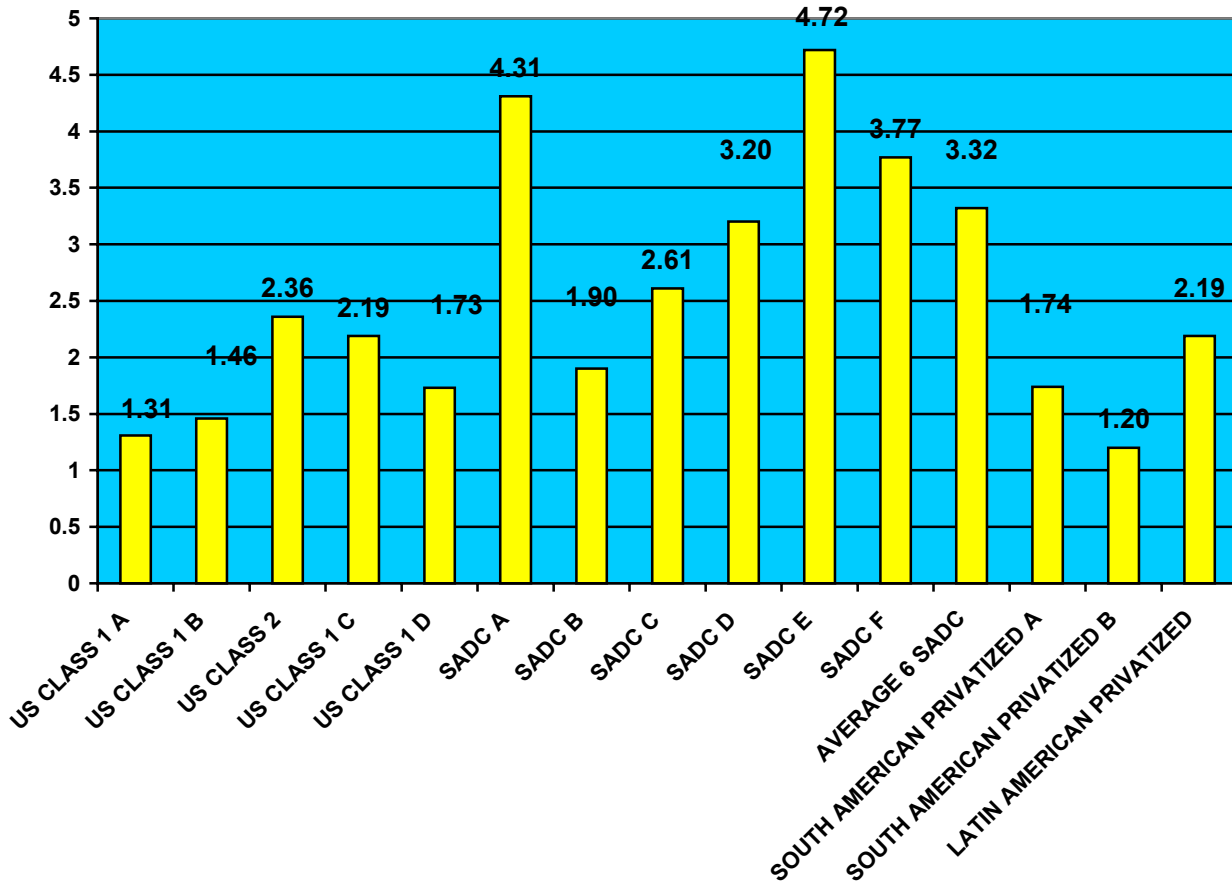
TKM Per Route KM



Good
↑

Revenue Per TKM

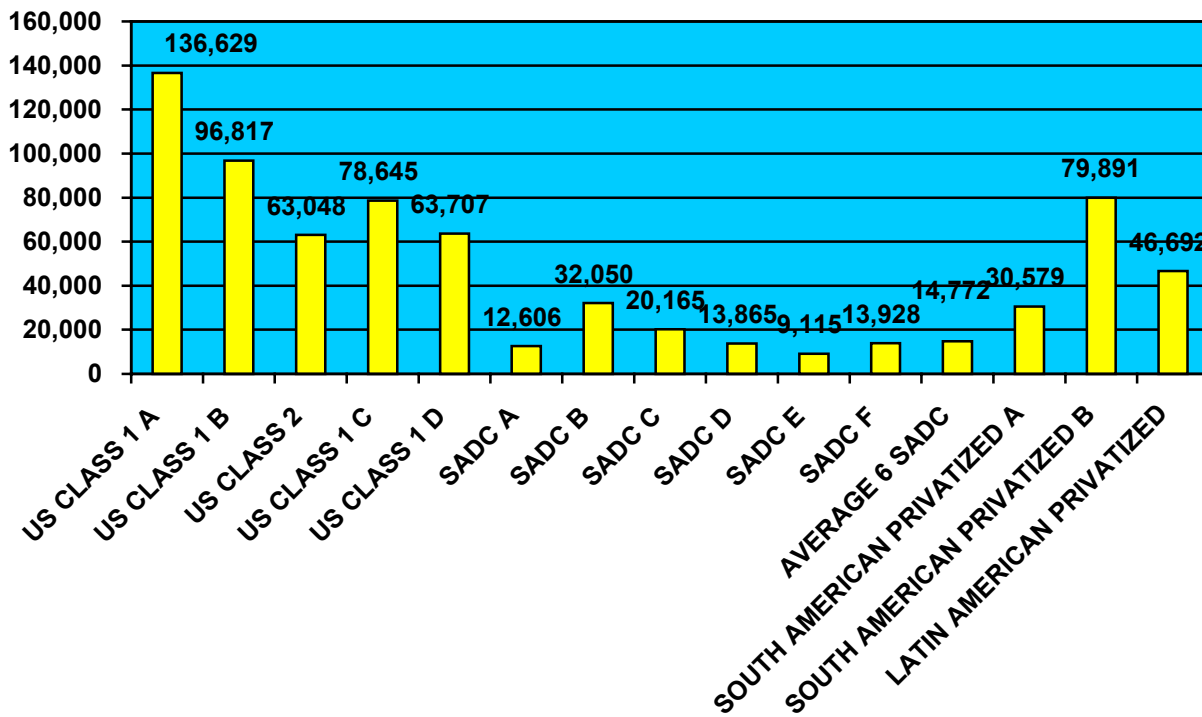
Cents



Good



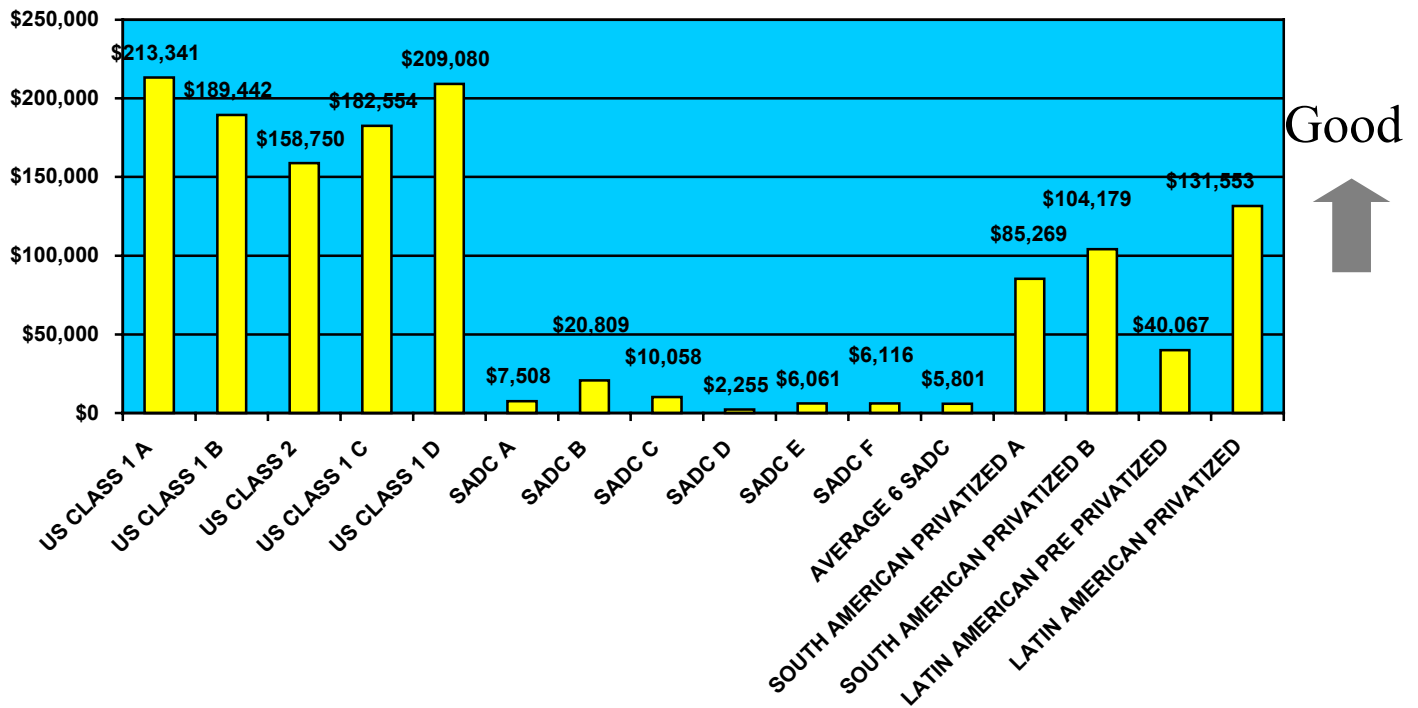
Ton Kilometers (000) Per Locomotive



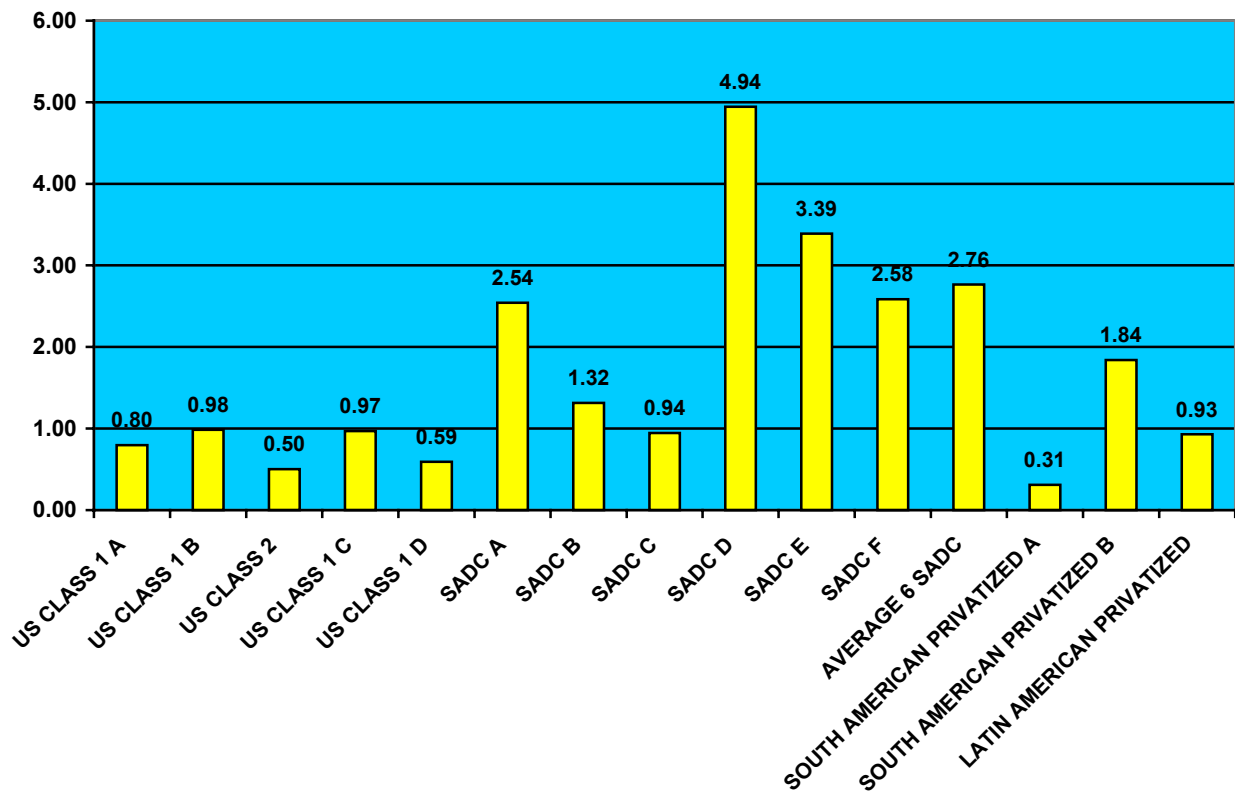
Good



Revenue Per Employee



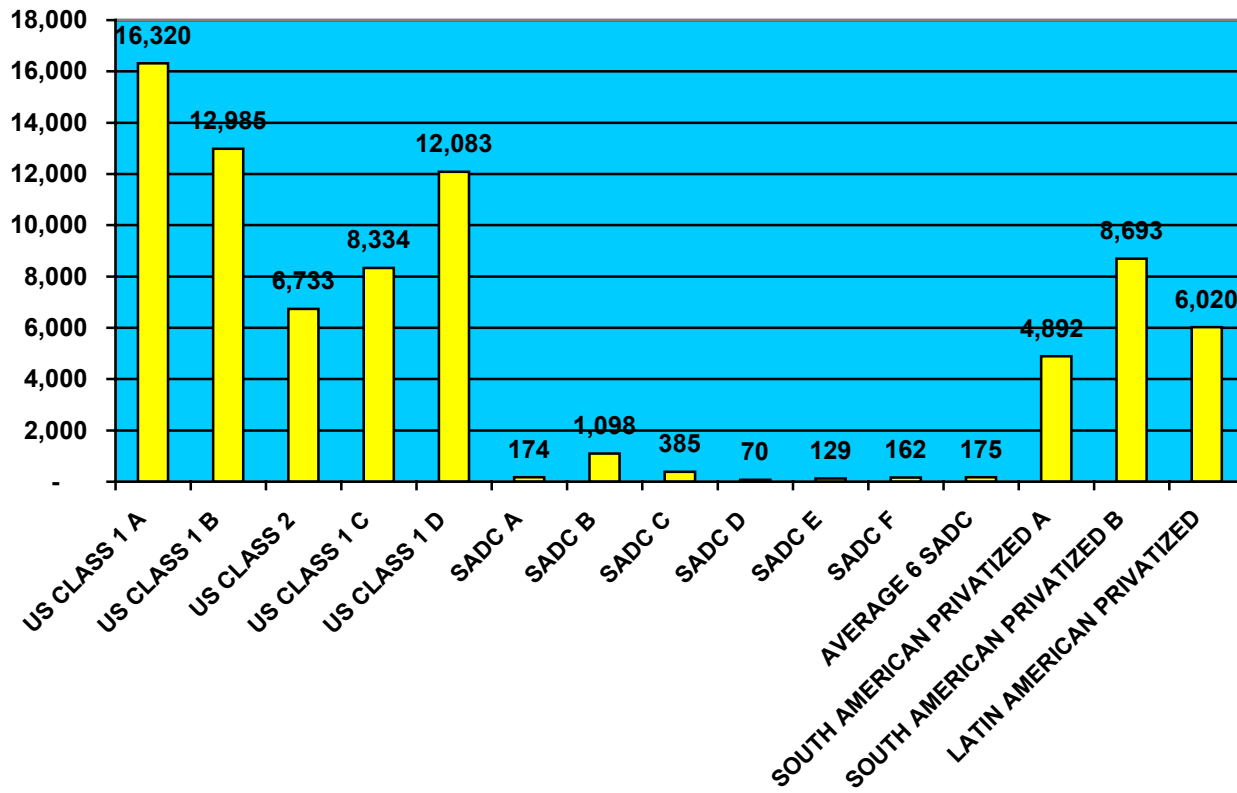
Employees Per Route KM



Good



Ton Kilometers (000) Per Employee



Good

